



2009 NATIONAL BUSINESS ETHICS SURVEY®

Detailed Survey Methodology and Technical Information

Overview

The 2009 National Business Ethics Survey® (NBES) is the sixth such survey conducted by the Ethics Resource Center (ERC). Throughout these survey reports we compare data from 2009 with that from the 2007, 2005, 2003, and 2000 NBES as well as ERC's 1994¹ Survey of Ethics in American Business (EAB) to identify trends.

The survey methodologies employed in the 2009 National Business Ethics Survey and the 2007, 2005, 2003, and 2000 NBES surveys were essentially identical and all five are addressed in the same section of this document. Rather than providing redundant details about the 2000, 2003, 2005, and 2007 NBES methodologies, we only include information about these surveys where they differ slightly from the methodology employed in 2009. Because the survey methodology and sample from 1994 did differ from the others, we describe this survey separately. A limitations section is also included.

The 2009, 2007, 2005, 2003, and 2000 National Business Ethics Surveys

All aspects of data collection for the 2009 study were managed by Opinion Research Corporation using a questionnaire developed by ERC, and all surveys since 2000 have been conducted over the telephone. There are five minor differences in the nature of the five surveys.

First, in 2000, 2003, 2005, and 2007, data was collected from multiple sectors, i.e., business, government, and nonprofits. The 2000, 2003, and 2005 reports included data from all these sectors. In 2007, the data was segregated by sector for the purposes of analysis and reporting. In 2009, data has been collected from the business sector exclusively.

Second, the sample size has increased. In 2009, 3010 responses were collected. Review of the data revealed that 158 respondents worked in the government sector. These cases were removed from all analysis, meaning that 2852 responses were from employees in the for-profit sector. In 2007 and 2005 the sample sizes were 3452 (including 1929 for-profit employees) and 3015 (including 1869 for-profit employees) respectively. The 2003 survey contained 1503 interviews (961 for-profit employees), and the 2000 survey contained 1500 (994 for-profit employees).

Third, the length of time needed to conduct the interviews varied. In 2009, the interviews were completed over a six-week period, beginning on July 20, 2009, and ending on August 27, 2009. The interviews were completed over an eight-week period in 2007 and over 16 weeks in 2005. In

¹ The National Business Ethics Survey title was not used until 2000. The 1994 study was referred to as the Survey of Ethics in American Business (EAB).

2003, the survey was conducted over a seven-week period, and the 2000 survey was conducted over a three month period.

Fourth, the average length of the telephone interviews has varied over time, depending on the length of the question set. In 2009, the average interview lasted 22 minutes. In 2007, the interviews averaged eighteen minutes and, in 2005, the average interview lasted eleven minutes. The average was twelve minutes in 2003, and, in 2000, the average was 20 minutes.

Fifth, in 2000 and 2003, respondents were not explicitly given the option to say “neither agree nor disagree” in the strongly agree/strongly disagree scaled questions, or “I don’t know” to any of the questions. Those who gave these answers without being prompted were recorded as having done so, and, not surprisingly, small percentages in both surveys volunteered those answers. In 2005, respondents were explicitly told in the beginning of the survey, “If I ask you any questions you do not know the answer to, just tell me and I will move on.” Additionally, in 2005, 2007, and 2009, the “neither” option was read aloud in each of the strongly agree/strongly disagree scaled questions. Slightly higher percentages tended to say “neither” and “don’t know” in the 2005, 2007, and 2009 surveys.

In the 2009 NBES, when comparisons are made across years, “don’t know,” “not applicable,” and “refused” responses are omitted from the calculation of percentages. The “neither agree nor disagree,” and “neither satisfied nor dissatisfied” responses have been included only in calculations involving measurement of ethical culture. As a result of these omissions, percentages presented in the 2009, 2007, and 2005 NBES reports regarding data from 1994, 2000, or 2003 differ from that same data presented in previous reports, in which these answer choices were included in calculations in various ways.

Sample Selection

In 2009, calls were made to a randomly selected sample of residential households within the contiguous 48 states.² These calls were based on a purchased sample listing of randomly generated telephone numbers.³ The list that was ordered was a representative sampling of the nation by time zone. Figure A.1 displays the proportion of households across the four time zones included in the 2009 National Business Ethics Survey and the proportion of respondents surveyed in each time zone.

² If the person first contacted within a given household was eligible, they were interviewed. If they were ineligible, they were asked whether there was another household member who met the eligibility criteria. Telephone respondents were not asked to list all eligible household members so that one might be randomly selected among them.

³ The sample listing was generated using a random-digit dialing (RDD) procedure.

Figure A.1: Survey Distribution by Region in 2009 National Business Ethics Survey

Region	% of U.S. Household Population*	% of 2009 National Workplace Ethics Survey
Northeast	18.2%	18.4%
Midwest	21.7%	22.5%
South	38.4%	36.1%
West	21.7%	23.1%

*According to U.S. Census data

The goal in fielding the National Business Ethics Survey was to attain a representative regional distribution matching the entire sample we received. As shown in Figure A.1, in 2009 a sample was interviewed that was within two percentage points of the total percentage of households for any given region. As a result, we achieved a random national sample of the population (that has a land-line telephone). The sampling error of a survey conducted under these circumstances is $\pm 1.8\%$ at the 95% confidence level.

Sample Eligibility

Screening procedures in 2009 were similar to those used in the 2000, 2003, 2005, and 2007 surveys. The only difference in sample eligibility between the 2009 survey and prior iterations was that participants were required to work in for-profit companies, rather than being eligible if they worked in any type of organization (business, government, or nonprofit).

To be eligible for participation in the 2009 survey, respondents had to be:

- Eighteen years of age or older;
- Currently employed;
- Working for a company that employs at least two people; and
- Working at least 20 hours per week for their primary employer.

The screening criteria were used primarily to ensure that employees selected for the National Business Ethics Survey would have a reasonable basis for answering the survey questions. For example, we screened out employees who worked in one-person companies because many of the survey questions would not have been relevant to these employees.

Confidentiality

Employees were assured that their individual responses to all survey questions would be held in confidence.

Response Rate

Response rate calculations are given below. These are based on a disposition of all telephone survey calls, presented in chart A.2. The classification of each disposition is in the first column and the number of cases within that disposition is presented in the second column; each case represents a discrete telephone number and the outcome for it.

The first calculation, found in the third column, represents the *completion rate* (19%). The completion rate is defined as the proportion of households that were reached which resulted in a successful interview. For this purpose, a ‘successful interview’ includes the brief interview that determined whether or not a household met the eligibility requirements of the study. This figure was derived by adding the total number of completed interviews (3,010) to the total number of screenouts (5,270) and dividing this total by the sum of completions (3,010), screenouts (5,270), partial interviews (29), refusals (22,037), and callbacks and appointments that were not reached (13,509).⁴

The definition of response rate is the proportion of completions to eligibles. Differences in reported response rates reflect different assumptions regarding which dispositions belong in the denominator of that calculation. The most liberal definition of response rate is to take the number of completions and divide it by the sum of completions, partials, eligible refusals and eligible callbacks. Determining the number of eligible refusals and eligible callbacks requires an intermediate calculation.

In order to determine the number of refusals and callbacks that are likely to have been eligible for inclusion in the survey (and thus should be included in the denominator of the response rate calculation), we need an intermediate calculation of the eligibility ratio within working households (ERWH). Conceptually, this ratio is the proportion of **working household numbers** that would qualify for the survey. It is obtained by summing together the number of known eligible households (completions and partials) and dividing the figure by the number of known households for which eligibility has been determined (the sum of completions, partials and screenouts). This ratio $((A+B)/(A+B+G))$ is calculated to be 0.366.⁵

This ratio (0.366) is then multiplied by the number of refusals and callbacks respectively to produce the number of refusals and callbacks that are imputed to be eligible for survey participation. Using an ERWH of 0.366, the number of refusals to be included in ‘Response Rate 1’ is found to be 8,065.54.⁶ And, likewise, the number of callbacks and appointments not reached that are to be included is found to be 4,944.29.⁷ Response Rate 1 can then be calculated by dividing the number of completed interviews by the sum of completed calls, partial interviews, and the 8,065.54 refusals and 4,944.29 callbacks calculated using the ERWH. Following this formula, ‘Response Rate 1’ is found to be 18.8%.⁸

Response Rate 1 does not, however, account for the possibility that some of the numbers that were never answered may have been eligible households. The fact that they were called as many times as they were suggests a reasonable probability that these numbers are, in fact, not working households, but we cannot know this with certainty. For this reason, we calculate a more conservative estimate of the response rate apportioning a fraction of these numbers. In order to derive this estimate, we need to estimate the number of unanswered calls that would have both been working and eligible households. To determine this, we first need to derive the probability that a given unanswered number is a working household (PWH). This will then be multiplied by the eligibility ratio

⁴ $[(3,010+5,270)/(3,010+5,270+29+22,037+13,509)]=.19$

⁵ $[(3,010+29)/(3,010+29+5270)]=.366$

⁶ $(.366)(22,037)=8,065.54$

⁷ $(.366)(13,509)=4,944.29$

⁸ $[3,010/(3,010+29+8065.54+4,944.29)]=.188$

(ERWH) just calculated. This product is an estimate of the overall probability that a given unanswered number is both a working household and that that household is eligible for participation.

The probability that a given number is of a working household is best estimated by dividing the number of all known households by the number of total sample for which household status has been determined. The numerator is calculated by adding together completed interviews, partial interviews, refusals, callbacks and appointments not reached, and screenouts (A+B+C+D+G) and dividing the resultant figure by the sum of completed interviews, partial interviews, refusals, callbacks and appointments not reached, screenouts, **and** non-residential and non-working numbers (A+B+C+D+G+F). Using this formula, the probability that a given number is a working household is calculated to be 0.229.⁹

The proportion of telephone numbers imputed to be working households thus derived is then multiplied by the ERWH calculated above (0.366) to produce an overall probability of working eligible households of 0.084. In other words 8.4% of the unreached numbers are imputed to be **both** working households and eligible for this particular survey. This is then multiplied by the 67,600 numbers that were never answered to impute that 5,678.40 of these numbers would have been households that would have been eligible for participation in the survey. When this number is added into the denominator of Response Rate 1, the response rate drops from 18.76% to 13.85%.¹⁰

Figure A.2: Disposition of Survey Telephone Calls

Result	Final Disposition	Completion	Rsp Rate 1	Rsp Rate 2
A. Completed Calls	3010	3010	3010	3010
B. Partial Interviews	29	29	29	29
C. Refusals	22037	22037	8065.54	8065.54
D. Callbacks and Appointments Not Reached	13509	13509	4944.29	4944.29
E. No Answer	67600			5678.40
F. Non-Residential or Non-Working	71665			
G. Screened Out (Ineligible)	5270	5270		
Total	183120	43855	16048.83	21727.23
Calculated Rate		18.90%	18.76%	13.85%

⁹ [(3,010+29+8,065.54+4,944.29+5,270)/(3,010+29+8,065.54+4,944.29+5,270+71,665)]=0.229

¹⁰ (3,010)/(3,010+29+8,065.54+4,944.29+5,678.40)=.1385

Weighting of Data

The 2005, 2003, and 2000 surveys were not weighted for analysis. In order to make the analysis more closely reflect the working population in the U.S., in 2007 ERC decided to weight the 2007 data and all previous years. ERC has continued this practice for this year's analysis (except 1994). The factors used to weight the data this year differ slightly from 2007 – education was included as a factor in 2007, but has not been used in 2009.¹¹ ERC elected to not retroactively re-weight and recalculate data from prior survey years and to report prior years' results as published in 2007.

National Business Ethics Survey Standard Weighting: the weighting across the 2009 data is based on gender and age. The weighting across 2007, 2005, 2003, and 2000 is based on gender, age, and education. The objective of the weighting is to accurately reflect the U.S. labor force. For gender and age we used the month of September 2009 from the U.S. Current Population Survey (CPS) as the benchmark. For gender, age, and education we used the 2000 U.S. decennial census as the benchmark. The CPS is a joint product of the U.S. Census Bureau and Bureau of Labor Statistics which tracks the working population in the U.S.

Impact of the Weighting on NBES Results

We compared the weighted and un-weighted results of the 2009 NBES. Of the 146 non-demographic questions asked, 48 of these questions had a difference of 1 percentage point or more between the weighted and unweighted results.¹² The majority (31 questions) of those 48 were asked of a subset of the total respondents; because of the reduced “N” sizes, weighting had a greater impact. Two-thirds of the 48 identified, subset questions are related to reporting of specific types of misconduct and specific types of perceived retaliation. Only 12% of all non-demographic questions had a difference of two or more percentage points between unweighted and weighted results.

Reliability of Scales

In conducting analyses for the 2007 survey report, we developed scales for ethical culture as well as its several components: the ethical actions of top management, those of supervisors, and those of coworkers. In 2009, these scales were revised. This took place because one question regarding rewards for ethical conduct and several questions regarding embedded ethical values that were asked in 2007 were not asked in 2009. All scales exceeded a Chronbach's alpha value of .85, indicating high reliability.

1994 Survey of Ethics in American Business

The Survey

The 1994 EAB survey was conducted by NFO Research, Inc., using a questionnaire developed by the ERC. The survey was self-administered¹³ and was mailed out to respondents in December 1993. A total of 4,544 were returned, of which 4,035 were usable.

Sample Selection

¹¹ Data about a respondent's education level was not collected in 2009.

¹² For additional information about differences, please contact ERC at ethics@ethics.org

¹³ Because the 1994 survey was self-administered, as opposed to the 2000, 2003, 2005, 2007, and 2009 surveys, which were conducted by telephone, we cannot rule out the potential for differences in findings due to differences in survey format.

A sample of 7,600 households was randomly selected from an existing NFO panel¹⁴ of approximately 550,000 households.

Sample Eligibility

The sample was selected based on the following screening criteria: To be eligible for the 1994 survey, respondents had to be employed but could not be members of any of the following groups: teachers, health professionals, local, state or federal government employees, members of the armed forces, students, or self-employed individuals.

Confidentiality

Employees were assured that their individual responses to all survey questions would be held in confidence.

Response Rate

Of the total 7,600 surveys mailed out to respondents, 4,544 surveys were returned, representing a 60% response rate. Of those returned, 4,035 were found to be usable, resulting in a usable response rate of 53%.

“Don’t Know” Response Option

Some questions included a “don’t know” response option, and others did not. To maintain comparability across years, when we present data from 1994 in this report we do not include the “don’t know” response in the calculations. There were no scaled strongly agree/strongly disagree questions in 1994.

Data Analysis

Data reported in the 2005, 2003, and 2000 NBES as well as the 1994 EAB reports were unweighted for analysis. Given the survey sampling methods used, we believed that our best estimate of the actual population statistics were the unweighted statistics derived from the survey samples. As noted previously, for the 2009 and 2007 analysis, we weighted the results using the U.S. Current Population Survey September estimates and the 2009 decennial census data respectively.

Many of the analyses we present in the 2009 NBES are cross-tabulations of weighted data. We examined significance using the chi-square and ANOVA statistics. The threshold for reporting relationships as statistically significant was set as $p < .05$.

Limitations of this Report

Fear of retaliation may have led some employees responding to the 2009 National Business Ethics Survey to over-report positive ethics perceptions and under-report negative ones.

When talking to an unknown interviewer, we can speculate that employees risk more by candidly stating negative versus positive views on ethics in their organizations. If dissatisfied employees systematically under-reported negative perceptions – particularly on sensitive ethics questions, such as observed misconduct and pressure to compromise ethics standards – these 2009, 2007, 2005,

¹⁴ Because the 1994 survey was conducted with a volunteer panel, we cannot rule out the potential for differences in findings between 1994 and 2000, 2003, 2005, 2007, and 2009 due to differences in the populations surveyed. See also the Limitations section which follows.

2003, and 2000 survey data may be biased in a positive direction. To reduce this possibility, interviewers assured employees of the confidentiality of their responses.

The following presents characteristics of respondents and their organizations from the 2009 National Business Ethics Survey. For purposes of comparison, similar data are also presented for the Ethics Resource Center's six previous national ethics surveys: the 2007 National Business Ethics Survey, the 2005 National Business Ethics Survey, the 2003 National Business Ethics Survey, and the 2000 National Business Ethics Survey as well as, where applicable, the 1994 Survey of Ethics in American Business. In order to make data from all years as comparable as possible, we have excluded "don't know" responses and refusals to answer questions from the calculation of percentages.

**Ethics Resource Center's 2009 National Business Ethics Survey
Participant Demographics**

Number of Employees in Entire Organization across Locations

Number of employees in organization	2009 Survey	2007 Survey	2005 Survey	2003 Survey	2000 Survey
2 to 24	17%	22%	23%	29%	23%
25 to 99	13%	15%	15%	15%	15%
100 to 499	18%	17%	17%	13%	17%
500 to 1,999	16%	13%	12%	8%	11%
2,000 to 9,999	16%	12%	11%	13%	13%
10,000 or over	13%				
(10,000 to 100,000 for 2007)		13%	22%	23%	21%
100,000 and over	8%	8%	--	--	--

*N(2000) = 948; N(2003) = 948; N(2005)=1,920; N(2007)=1,928 ; N(2009)=2,853. Respondents who said "don't know" or refused to answer the question are not included in the calculation of percentages (6% in 2000; 5% in 2003; 1% in 2005; 0.1% in 2007; 0.0% in 2009).

Organization Has Experienced Merger, Acquisition, or Restructuring During Last Two Years

Response	2009 Survey	2007 Survey	2005 Survey	2003 Survey	2000 Survey
Yes	30%	33%	30%	30%	45%
No	70%	67%	70%	70%	55%

*N(2000) = 973; N(2003) = 967; N(2005)=1,861; N(2007)=1,860; N(2009)=2,768. Respondents who said "don't know" or refused to answer the question are not included in the calculation of percentages (3% in 2000; 3% in 2003; 4% in 2005, 4% in 2007; 3% in 2009).

Number of Years Employed in Current Organization

Tenure in Years	2009 Survey	2007 Survey	2005 Survey	2003 Survey	2000 Survey	1994 Survey
Less than a year	4%	9%	10%	14%	13%	--
1 to 2 years	23%	22%	21%	19%	23%	--
3 to 5 years	21%	20%	24%	25%	22%	--
Less than 5 years	--	--	--	--	--	41%
6 to 10 years	20%	19%	19%	15%	16%	27%
11 or more years	31%	30%	26%	27%	25%	32%

*N(1994) = 3,884; N(2000) = 1,007; N(2003) = 995; N(2005) = 1,925; N(2007)=1,919; N(2009)=2,843. Respondents who said "don't know" or refused to answer the question are not included in the calculation of percentages (0.2% in 1994; 0% in 2000; 1% in 2003; 0.7% in 2005; 0.5% in 2007; 0.3% in 2009).

**Ethics Resource Center’s 2009 National Business Ethics Survey
Participant Demographics**

Employees Supervises or Manages Other People at Work

Response	2009 Survey	2007 Survey	2005 Survey	2003 Survey	2000 Survey
Yes	51%	47%	44%	49%	48%
No	49%	53%	56%	51%	52%

*N(2000) = 1007; N(2003) = 993; N(2005) = 1,926; N(2007) = 1,923; N(2009) = 2,848. Respondents who said “don’t know” or refused to answer the question are not included in the calculation of percentages (0% in 2000; 1% in 2003; 1% in 2005; 0.3% in 2007; 0.2% in 2009).

Level of Responsibility¹⁵

Response	2009 Survey	2007 Survey	2005 Survey	2003 Survey	2000 Survey
Senior Management	10%	12%	11%	15%	11%
Middle Management	19%	19%	14%	16%	15%
First Line Supervisor	15%	15%	18%	16%	20%
Non-management	46%	55%	58%	52%	53%
Other	10%	-	-	-	-

*N(2000) = 990; N(2003) = 971; N(2005) = 1,882; N(2007) = 1,840; N(2009) = 2,840. Respondents who said “don’t know” or refused to answer the question about the level of management they occupy are not included in the calculation of percentages (2% in 2000; 1% in 2003; 2% in 2005; 2% in 2007; 0.4% in 2009).

Ethnicity¹⁶

Response	2009 Survey	2007 Survey	2005 Survey
White	79%	82%	82%
African American/Black	10%	7%	8%
Hispanic/Latino ¹⁷	9%	9%	4%
Asian or Pacific Islander	3%	3%	2%
All other ethnic groups	8%	8%	4%

*N(2005) = 1,879; N(2007) = 1,881; N(2009) = 2,835. Respondents who said “don’t know” or refused to answer the question are not included in the calculation of percentages (3% in 2005; 2% in 2007; 1.8% in 2009).

Membership in Union, Guild, or Collective Bargaining Agreement

¹⁵ Columns do not add up to 100% because some respondents who said that they do supervise or manage people in the initial question about management level said “don’t know” or refused to answer the question when subsequently asked which management level they occupy.

¹⁶ The ethnicity question was asked in different ways in 2009, 2007, 2005, 2003, and 2000, so we have chosen to present only responses for 2005, 2007, and 2009. In 2007 and 2009, two ethnicity questions were asked. The first choice was an option to select between being Hispanic or not, and the second questions asked to choose specific ethnicity group from the list. Whoever reported Hispanic was recorded as Hispanic regardless of their second choice of ethnicity. In 2005 we had only one ethnicity question.

**Ethics Resource Center’s 2009 National Business Ethics Survey
Participant Demographics**

Response	2009 Survey	2007 Survey	2005 Survey	2003 Survey	2000 Survey
Yes	17%	11%	10%	9%	13%
No	83%	89%	90%	91%	87%

*N(2000) = 989; N(2003) = 990; N(2005) = 1,904; N(2007) = 1,904; N(2009) = 2,829. Respondents who said “don’t know” or refused to answer the question are not included in the calculation of percentages (2% in 2000; 1% in 2003; 2% in 2005; 1% in 2007; 0.8% in 2009).

Age

Response	2009 Survey¹⁸	2007 Survey	2005 Survey	2003 Survey	2000 Survey	1994 Survey
18 to 30 years old	23%	24%	26%	24%	26%	29%
31 to 45 years old	33%	34%	35%	38%	39%	33%
46 to 64 years old	39%	38%	35%	34%	32%	
65 years or older	4%	4%	4%	4%	3%	39%

*N(1994) = 3,904; N(2000) = 1,002; N(2003) = 991; N(2005) = 1,878; N(2007) = 1,884; N(2009) = 2,853. Respondents who said “don’t know” or refused to answer the question are not included in the calculation of percentages (0% in 1994; <1% in 2000; 1% in 2003; 3% in 2005; 4% in 2007; 0.6% in 2009).

Gender

Response	2009 Survey	2007 Survey	2005 Survey	2003 Survey	2000 Survey	1994 Survey
Male	53%	54%	61%	63%	57%	41%
Female	47%	46%	39%	37%	43%	59%

*N(1994) = 3,904; N(2000) = 1,007; N(2003) = 1,002; N(2005) = 1,939; N(2007) = 1,928; N(2009) = 2,853. Respondents who said “don’t know” or refused to answer the question are not included in the calculation of percentages (0% in 1994; 0% in 2000; 0% in 2003; 0.1% in 2005; 0% in 2007; 0% in 2009).

¹⁸ In 2009, the age bands were adjusted from previous years to the following groups: 18 to 29 years old, 30 to 44 years old, 45 to 63 years old, and 64 or older.